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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,428	12/05/2000	Paul Lippens	CASM116373	8709

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EXAMINER

SIMONE, CATHERINE A

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

SC

Office Action Summary	Application No.		Applicant(s)	
	09/673,428		LIPPENS ET AL.	
	Examiner		Art Unit	
	Catherine Simone		1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/1/04 has been entered.

Withdrawn Rejections

2. The 35 U.S.C. 102 rejection of claims 1-5, 8, 10, 11, 14, 16, 18 and 33 as anticipated by Namikawa et al. of record in the Office Action mailed 6/18/03, Pages 2-3, Paragraph #2 has been withdrawn due to the Applicants amendment filed 6/1/04.
3. The 35 U.S.C. 103 rejection of claims 6 and 7 over Namikawa et al. in view of Chamberlain of record in the Office Action mailed 6/18/03, Pages 3-4, Paragraph #4 has been withdrawn due to the Applicants amendment filed 6/1/04.
4. The 35 U.S.C. 103 rejection of claims 9, 12, 13, 15 and 17 over Namikawa et al. in view of Pettigrew et al. of record in the Office Action mailed 6/18/03, Pages 4-5, Paragraph #5 has been withdrawn due to the Applicants amendment filed 6/1/04.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. **Claims 1-5, 8, 17, 18 and 33** are rejected under 35 U.S.C. 102(a) as being anticipated by Mizukami (JP 10-105031).

Mizukami discloses a security element comprising a magnetic layer (Drawing 1, element 3) and an embossed layer (Drawing 1, element 2), the embossed layer having a diffractive pattern of a particular shape producing an optical diffraction effect, the magnetic layer being a soft magnetic layer (see abstract, lines 16-18) which is selectively magnetizable to show magnetic properties when exposed to a magnetic field, wherein at least part of the soft magnetic layer has the shape of the diffractive pattern of the embossed layer, the embossed layer affecting the magnetic properties of the soft magnetic layer such that when the security element is selectively magnetized the effects are detectable externally of the security element. Regarding **claims 2-4**, note a metal (aluminum) layer with a high specular reflectance (Drawing 2, element 5; also see page 2 of the translated detailed description, paragraph 0008). Regarding **claim 5**, note an adhesive layer (Drawing 1, element 4). Regarding **claim 8**, note the particular shape of the embossed pattern produces a hologram (see abstract, lines 10-11). Regarding **claim 17**, note the soft magnetic layer is a sputtered layer (see abstract, line 13-18). Regarding **claim 18**, note the effect on the magnetic properties of the soft magnetic layer inherently is at least a change in coercive force of 10% or a change in relative permeability of at least 10% (see abstract, lines 16-

19). Regarding **claim 33**, note the thickness of the soft magnetic layer is in the range of 150-700 nm (see abstract, lines 13-15 and see translated detailed description, page 2, lines 13-14).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 6 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizukami (JP 10-105031) in view of Chamberlain (5,762,377).

Mizukami discloses a security element comprising a magnetic layer (Drawing 1, element 3) and an embossed layer (Drawing 1, element 2), the embossed layer having a diffractive pattern of a particular shape producing an optical diffraction effect, the magnetic layer being a soft magnetic layer (see abstract, lines 16-18) which is selectively magnetizable to show magnetic properties when exposed to a magnetic field, wherein at least part of the soft magnetic layer has the shape of the diffractive pattern of the embossed layer, the embossed layer affecting the magnetic properties of the soft magnetic layer such that when the security element is selectively magnetized the effects are detectable externally of the security element. However, Mizukami fails to disclose the adhesive layer and the embossed layer comprising an a,b-ethylenically unsaturated carboxylic acid-based resin. Chamberlain teaches it is old and well-known in the analogous art an adhesive layer being an a,b-ethylenically unsaturated carboxylic

acid-based resin (see col. 15, lines 60-65) for the purpose of producing a security element with increased protection against counterfeiting.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have the adhesive layer and embossed layer in Mizukami comprise an a,b-ethylenically unsaturated carboxylic acid-based resin as suggested by Chamberlain in order to produce a security element with increased protection against counterfeiting.

5. **Claims 9-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizukami (JP 10-105031) in view of Pettigrew et al. (4,960,651).

Mizukami discloses a security element comprising a magnetic layer (Drawing 1, element 3) and an embossed layer (Drawing 1, element 2), the embossed layer having a diffractive pattern of a particular shape producing an optical diffraction effect, the magnetic layer being a single soft magnetic layer (see abstract, lines 16-18) which is selectively magnetizable to show magnetic properties when exposed to a magnetic field, wherein at least part of the soft magnetic layer has the shape of the diffractive pattern of the embossed layer, the embossed layer affecting the magnetic properties of the soft magnetic layer such that when the security element is selectively magnetized the effects are detectable externally of the security element. However, Mizukami fails to disclose the soft-magnetic layer comprising an alloy containing cobalt and niobium, together with a glass-forming element and an alloy having a composition Co 35-70, Fe 2-7, Ni 10-35, Mo 0-2, Si 12-20, B 6-12 and the soft-magnetic layer having a coercive force in the range 3 A/m to 500 A/m. Pettigrew et al. teaches it is old and well-known in the analogous art to have a soft-magnetic layer comprising an alloy containing cobalt and niobium, together

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with a glass-forming element (see col. 5, lines 27-28) and an alloy having a composition Co 35-70, Fe 2-7, Ni 10-35, Mo 0-2, Si 12-20, B 6-12 (see col. 6, lines 9-11) and a soft-magnetic layer having a coercive force in the range 3 A/m to 500 A/m (see col. 7, line 25-30) for the purpose of producing a security element with low coercivity and high permeability.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the soft-magnetic layer in Mizukami to comprise an alloy containing cobalt and niobium, together with a glass-forming element and an alloy having a composition Co 35-70, Fe 2-7, Ni 10-35, Mo 0-2, Si 12-20, B 6-12 and to have coercive force in the range 3 A/m to 500 A/m as suggested by Pettigrew et al. in order to produce a security element with low coercivity and high permeability.

Response to Arguments

6. Applicant's arguments with respect to claims 1-18 and 33 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Catherine Simone
Examiner
Art Unit 1772
July 23, 2004


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772 7/23/04